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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|---------------|-------------------------|---------------------|------------------|--|
| 09/616,944 | 07/14/2000 | Kazuyo Saito | 43890-427 | 6874 | |
| 75 | 90 04/21/2003 | | | | |
| McDermott Will & Emery | | | EXAMINER | | |
| 600 13th Street NW Washington, DC 20005-3096 | | | NGUYEI | NGUYEN, HA T | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 2812 | | |
| | | DATE MAILED: 04/21/2003 | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Applicati n N . | Applicant(s) | | | | |
|---|-------------------------------------|--|--|--|--|--|
| | 09/616,944 | SAITO ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Ha T. Nguyen | 2812 | | | | |
| The MAILING DATE of this communication appears on the c ver she t with the correspond nce address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1) Responsive to communication(s) filed on 12 M | <u> March 2003</u> . | | | | | |
| 2a)⊠ This action is FINAL. 2b)□ Thi | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 21-30 is/are pending in the applicatio | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. 6) Claim(s) <u>21-30</u> is/are rejected. | | | | | | |
| 7) Claim(s) 21-36 is/are rejected. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accep | oted or b)☐ objected to by the Exam | miner. | | | | |
| Applicant may not request that any objection to the | | | | | | |
| 11) The proposed drawing correction filed on | is: a) approved b) disappro | ved by the Examiner. | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | r (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | |

DETAILED ACTION

Notice to applicant

1. Applicants' Amendment and Response to the Office Action mailed 12-12-02 and the translation of the priority documents have been entered and made of record (Paper Nos. 6 and 7).

Response to Amendment

2. In view of Applicants' amendment to the claims, the objection to claim 29, for informality, and the rejection of claims 21-32 under 35 U.S.C. 112 first and/or second paragraph, has been withdrawn.

In view of Applicants' amendment to the claims, the rejections under 35 U.S.C. 103(a), as being unpatentable over Kawano et al. (JP Patent application 64-90517) in combination with the applied references have been withdrawn.

Applicants' arguments with regard to the rejections under 35 U.S.C. 103 have been fully considered, but they are not deemed to be persuasive. The response to these arguments will be incorporated in the new ground of rejection given below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371® of this title before the invention thereof by the applicant for patent.
- 4. Claims 21-23, 25-30, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi et al. (U.S. Patent 5972052, hereinafter "Kobayashi").

[Claim 21] Referring to Figs. 4-9 and related translated text, Kobayashi discloses a method of fabricating an electrolytic capacitor, comprising the steps of: (a) fabricating a positive electrode, a porous pellet 2; (b) fabricating a negative electrode of carbon paste layer 7 and silver paste layer 8 (Matsuo et al., USPN 3646404, col. 1, lines 16-19 is cited to support the

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examiner's statement concerning carbon/silver cathode) (c) forming an organic conductive material 4 on the surface of said positive electrode; and (d) disposing an electrolyte 6 between said positive electrode and said negative electrode (See First Example);

[Claim 22] wherein said solid organic conductive material is at least one of organic semiconductor and conductive polymer (See col. 9, lines 12-15);

[Claim 23] wherein a solution containing a polymerizable monomer is bonded to the surface of said positive electrode, and said bonded monomer is polymerized to form said solid organic conductive material (See col. 6, lines 5-36);

[Claims 25 and 32] wherein a solution containing at least one monomer of pyrrole, thiophene, or aniline is applied on the surface of said positive electrode, and said applied monomer is polymerized to form said solid organic conductive material (See col. 5, line 64-col. 6, line 36);

[Claim 26] wherein a solution containing a polymerizable monomer is applied on the surface of said positive electrode, and said applied monomer is chemically polymerized in liquid phase to form said solid organic conductive material (See col. 6, lines 5-36);

[Claim 27] wherein said polymerizable monomer is brought into contact with the surface of said positive electrode in a vapor-phase atmosphere of said polymerizable monomer, and polymerized in vapor phase to form said solid organic conductive material (See col. 6, lines 5-36);

[Claim 28] wherein said positive electrode is immersed in a liquid having a polymerizable monomer, said monomer is electrolytically polymerized to form said solid organic conductive material on the surface of said positive electrode (See col. 6, lines 5-36);

[Claim 29] wherein at said step (c), said solid organic conductive material of at least one of organic semiconductor and conductive polymer is formed, then said positive electrode having said solid organic conductive material is immersed in a soluble polymer solution and then dried so that a residual dry polymer of said soluble polymer solution is formed on the surface of said solid organic conductive material (See col. 3, lines 37-52 and col. 5, lines 12-23); and

[Claim 30] wherein said solid organic conductive material is in a state swollen in an electrolyte (see paragraph bridging cols 6 and 7).

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Note that the examiner considered Kobayashi to teach only one embodiment with different options shown by the different examples, therefore, rejection under 35 U.S.C. 102(e) is proper, even though the features may come from different examples.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103® and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 25-30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi.

Notes: In a narrower interpretation, each example is considered to be an embodiment, then the following rejections apply.

[Claims 25 and 32] Kobayashi also discloses wherein a solution containing at least one monomer of pyrrole, thiophene, or aniline is applied on the surface of said positive electrode, and said applied monomer is polymerized to form said solid organic conductive material (See col. 5, line 64-col. 6, line 36);

[Claim 26] wherein a solution containing a polymerizable monomer is applied on the surface of said positive electrode, and said applied monomer is chemically polymerized in liquid phase to form said solid organic conductive material (See col. 6, lines 5-36);

[Claim 27] wherein said polymerizable monomer is brought into contact with the surface of said positive electrode in a vapor-phase atmosphere of said polymerizable monomer, and polymerized in vapor phase to form said solid organic conductive material (See col. 6, lines 5-36);

[Claim 28] wherein said positive electrode is immersed in a liquid having a polymerizable monomer, said monomer is electrolytically polymerized to form said solid organic conductive material on the surface of said positive electrode (See col. 6, lines 5-36); and

[Claim 30] wherein said solid organic conductive material is in a state swollen in an electrolyte (see paragraph bridging cols 6 and 7).

Therefore, it would have been obvious to use Kobayashi's teaching to obtain the invention as specified in claims 25-30 and 32.

7. Claim. 24 ° 1. 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi, as applied to claims 21-23, 25-30, and 32 above, in view of Yoshimura et al. (U.S. Patent 4864472, hereinafter "Yoshimura").

Kobayashi discloses substantially the limitations of claim: 24 :..., as shown above.

But it does not disclose expressly wherein said solid organic conductive material has at least one organic semiconductor of 7,7,8,8-tetracyanoquinodimethane complex and its derivatives.

However, the missing limitation is well known in the art because Yoshimura discloses this feature (See col. 2, lines 17-39).

A person of ordinary skill is motivated to modify Kobayashi with Yoshimura to use a conventional material for the same purpose.

Therefore, it would have been obvious to combine Kobayashi with Inoue to obtain the invention as specified in claim. 24

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha Nguyen whose telephone number is (703)308-2706. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM, except the first Friday of each bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached on (703) 308-3325. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Ha Nguyen

Primary Examiner

04-17-03